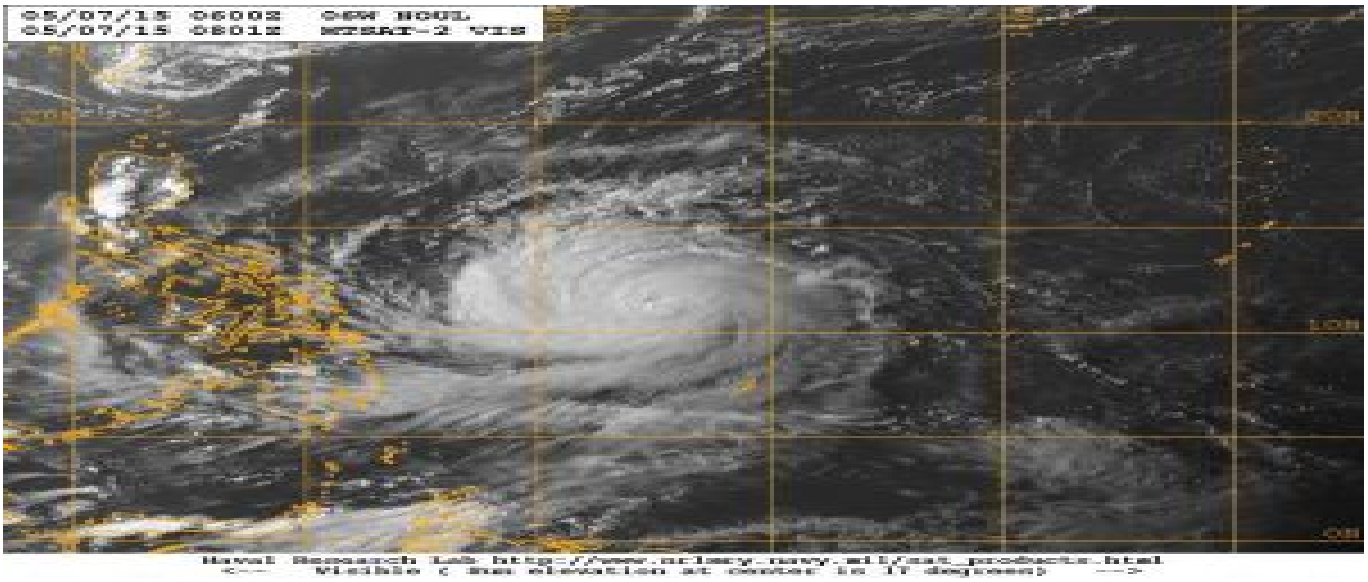
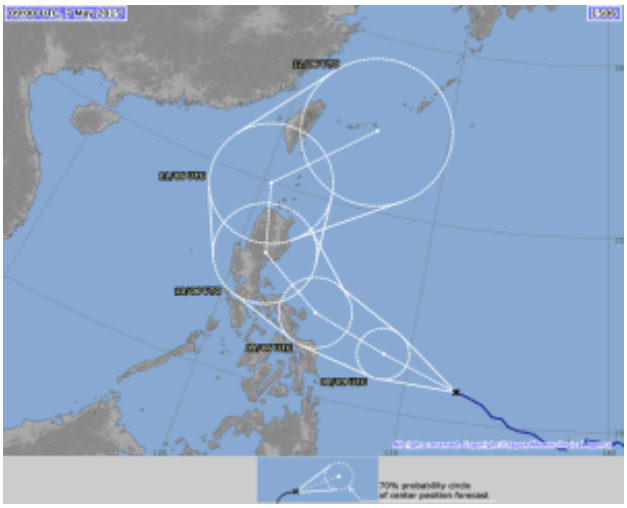
Active tropical storm season in the Northwest Pacific as another typhoon heads for the Philippines

Description

Typhoon Noul is currently to the east of the Philippines in the Northwest Pacific, and is heading steadily west-northwest. Noul is expected to continue moving towards the Philippines whilst intensifying further to a very strong typhoon. The storm is expected to make landfall in the Philippines this weekend.



There is still some uncertainty in the exact track, but currently Noul looks likely to make landfall on the east coast of Luzon, bringing very strong winds with gusts of 130kt (150mph), coastal and inland flooding with total rainfall accumulations of up to 400mm possible, and potential landslides across large parts of northern Luzon. There is also a risk of significant impacts in Manila if Noul takes a slightly more southerly track.



Track from Japan Meteorological Agency

Although the typhoon is expected to weaken next week, Noul could also bring some heavy rain to parts of Japan.

This is the sixth tropical storm of the north-west Pacific season and the fourth to become a typhoon, which is an unusual level of activity so early in the season. And yet another tropical storm looks set to develop behind Noul, possibly following a similar path.

The Met Office works closely with counterparts at the Philippines weather service PAGASA, providing the latest information on computer model predictions of the likely track and intensity of Typhoon Noul as it nears the country.

Official warnings of west Pacific tropical storms are produced by the Japan Meteorological Agency. The Met Office routinely supplies predictions of cyclone tracks from its global forecast model to regional meteorological centres worldwide, which are used along with guidance from other models in the production of forecasts and guidance.

Met Office StormTracker provides a mapped picture of tropical cyclones around the globe with access to track history and six-day forecast tracks for current tropical cyclones from the Met Office global forecast model and latest observed cloud cover and sea surface temperature. We also provide updates on current tropical storms via @metofficestorms on Twitter.

Date Created
May 2015

Ten Tors

Description

This weekend sees the 2015 Ten Tors challenge and once again, the Met Office will be providing tailored forecasts for the organisers to help with event planning and coordination. This year, for the first time, an Operational Meteorologist will also be at Okehampton Camp for the weekend, providing the latest information on weather conditions across Dartmoor throughout the event to help the organisers make the necessary decisions to keep the teams safe.

Forecast

Chief forecaster Dan Suri said “The event may start on rather a wet note, with some heavy showers likely on Saturday morning”. These showers will clear later in the morning leaving a drier and brighter afternoon. It will be breezy too, making it feel quite chilly in the wind. Saturday night will be largely dry, but it is likely to become murky through the early hours of Sunday, with occasional drizzle and hill fog. The cloud base will probably lift a little during Sunday morning, but higher parts of the Moor are likely to stay murky, and whilst the odd brighter spell may develop with shelter from the wind, it will remain largely cloudy. Still quite breezy on Sunday too.

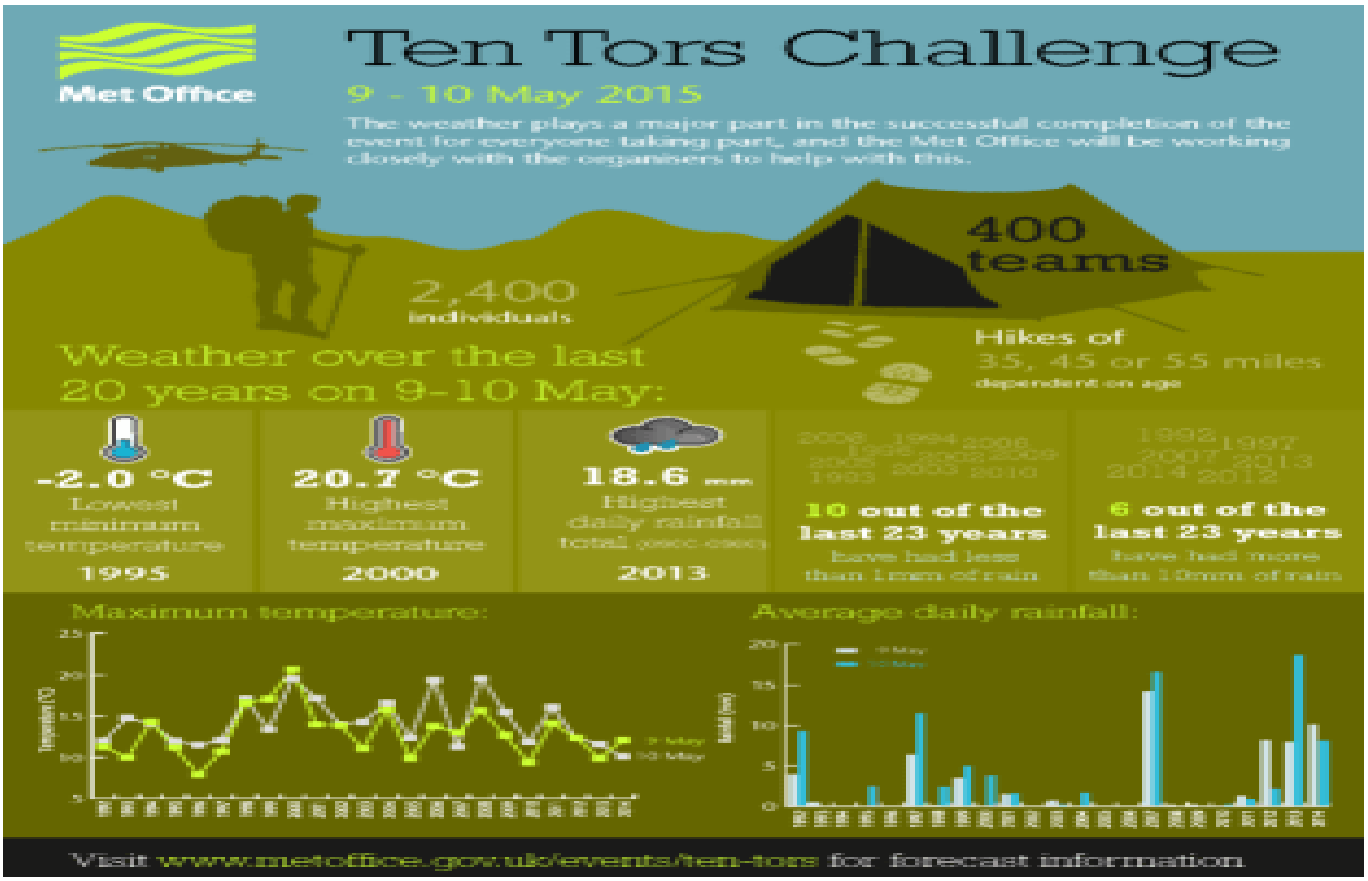
The challenge

The weather plays a major part in the successful completion of the event for everyone taking part. Around 400 teams of six take part in the challenge to complete the course. There are three different course lengths, depending on the age and ability of the team:

- 35 miles
- 45 miles
- 55 miles.

The idea of the challenge is for the teenagers to become self-sufficient for the weekend – carrying everything they’ll need for the trek and making their own decisions.

At this time of year, conditions can be varied, from torrential rain to hot sunshine.


Met Office
Ten Tors Challenge
9 - 10 May 2015
The weather plays a major part in the successful completion of the event for everyone taking part, and the Met Office will be working closely with the organisers to help with this.
400 teams
2,400 individuals
Hikes of 35, 45 or 55 miles dependent on age
Weather over the last 20 years on 9-10 May:
-2.0 °C
Lowest minimum temperature
1995
20.1 °C
Highest maximum temperature
2000
18.6 mm
Highest daily rainfall total
2013
10 out of the last 23 years
have had less than 1mm of rain
6 out of the last 23 years
Maximum temperature:
Average daily rainfall:
Visit www.metoffice.gov.uk/events/ten-tors for forecast information

For more information about the event, including the latest weather and a video explaining the variety of conditions you might expect on Dartmoor, take a look at our events pages.

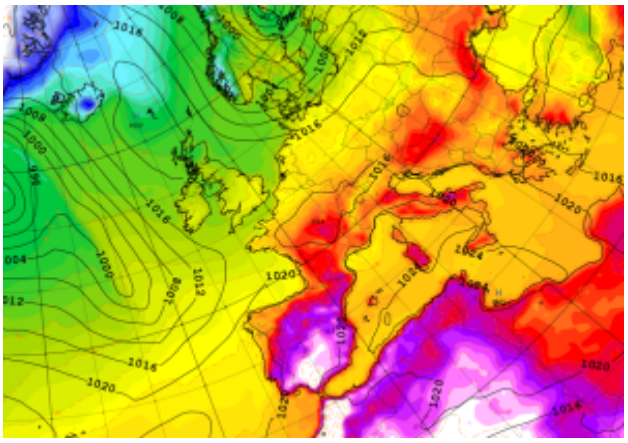
Our National Park forecast service includes forecasts for a wide range of locations on Dartmoor, many of which are included within the Ten Tors event. You can also find forecast information on our weather pages.

Date Created
May 2015

Possible record heat in Spain, while heavy rain and snow affect the Alps

Description

Parts of Spain, Portugal and southern France are experiencing unusually high temperatures at the moment. On Tuesday, Seville recorded 38C, and today will be another very hot day for the time of year, with temperatures widely expected to reach the low to mid 30s Celsius.



Met Office Global Model mean sea level pressure and temperature

The hottest conditions will be across the Andalucía region of southern Spain. If temperatures reach or exceed 40C in Seville today this will be a new May record. Cooler conditions will gradually spread from the north tomorrow, although another very hot day is likely in southern Spain. Temperatures are then expected to return closer to average in all regions by Friday.

Meanwhile, southern Germany, Switzerland, Austria, and northern Italy are at risk of heavy rainfall over the coming days, with heavy snow possible on Friday across the Alps. Up to 150mm of rain could fall within 48 hours, possibly leading to flash flooding and landslides in this mountainous region of Europe, as well as increasing the avalanche risk due to fresh snowfall.

Whilst neither of these two weather events in Europe will affect the UK, we are expecting some heavy rain of our own on Thursday. The band of rain will move across southwest England during the early hours and edge slowly northeastwards through the day, but become almost stationary across parts of Wales, central-southern and southeast England. However, northern England, Northern Ireland and Scotland will remain largely dry and fine.

Date Created
May 2015

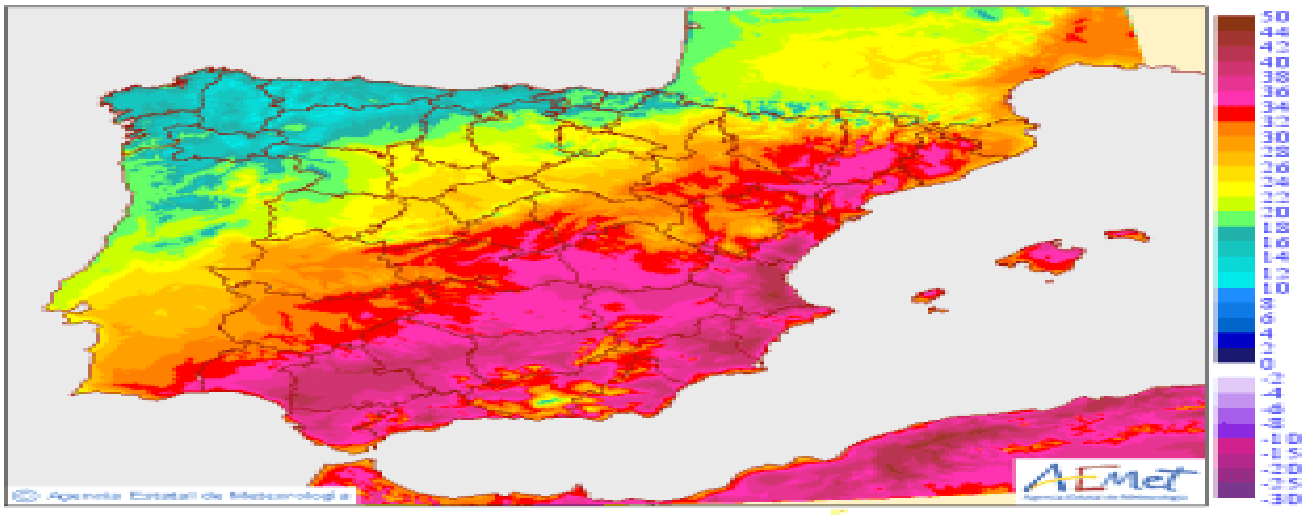
Record May temperatures for Spain

Description

Update: On Thursday, records were broken once again across southeast Spain. Valencia equalled Lanzarote Airport's 42.6C from the previous day. Other stations in the Valenciana region exceeded this value, with Xativa and Carcaixent reaching 42.7C and 42.9C respectively; however these are as yet unconfirmed so are not official. Either way, not only is this 42.6C a new Spanish record for May, but a European-wide May record.

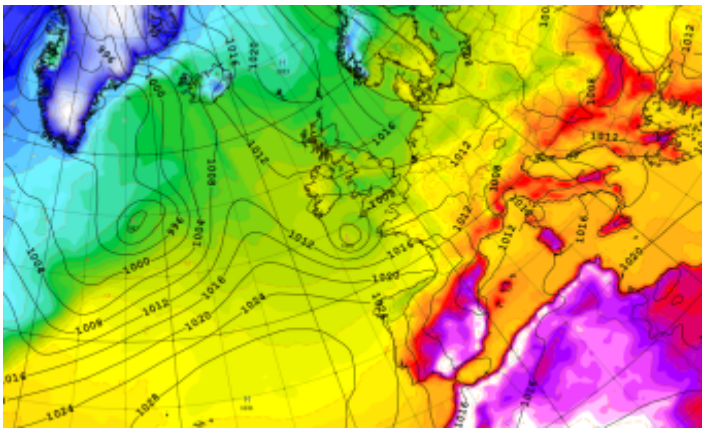
Meanwhile, the heat is spreading to other parts of Europe, with extreme warmth expected today along the north coast of Sicily and parts of mainland southern Italy.

A new record maximum temperature for Spain was set yesterday, with many local records also broken, and the heat continues today in the southeast.



The new record of 42.6C was recorded at Lanzarote Airport in the Canary Islands, beating the previous May record for Spain by a relatively large 2.5 degrees. It also beats the Lanzarote station's own previous highest May temperature by a whopping 6 degrees.

The previous May record in Spain was 40.1C at Cordoba on the mainland, and Cordoba itself recorded a new May station record on Wednesday with 41.2C.



Met Office Global Model mean sea level pressure and temperature

Further records could be broken today in parts of Andalucía, Mercia and Valenciana as air continues to feed in from North Africa. However, a cold front is pushing gradually southeastwards across Spain, bringing cooler air across much of the country by the end of the week.

Date Created
May 2015

El Niño and its impact on global weather

Description

Forecast centres around the world have now declared that an El Niño, the most powerful fluctuation in our climate system, has begun in the tropical Pacific.

For more than a year, scientists have been talking of an increased risk of the start of El Niño conditions in the tropical Pacific.

Scientists have been watching closely because it can change the odds of floods, droughts, heat waves and cold seasons for different regions around the world and can even raise global temperatures.

Early signs of an El Niño last year failed to fully develop and atmospheric conditions remained close to neutral into the start of 2015.

Now, however, observations from the tropical Pacific show that we have moved to weak El Niño conditions for the first time in five years.

While it is still too early to determine with confidence how strong this El Niño might be forecast models from centres around the world – including the Met Office – suggest this El Nino could strengthen from September onwards.

What are the impacts likely to be?

El Niño is a warming of the Pacific Ocean as part of a complex cycle linking atmosphere and ocean. It sees a huge release of heat from the Pacific Ocean into the atmosphere, which can disrupt weather patterns around the world.

It can be linked with poor monsoons in Southeast Asia, droughts in southern Australia, the Philippines and Ecuador, blizzards in the United States, heatwaves in Brazil and extreme flooding in Mexico.

The consequences of El Nino are much less clear for Europe and the UK.

Each El Nino event is unique, however, so it’s not possible to say exactly what the consequences will be for any given year.

What will happen next?

Predicting exactly how an El Niño might develop remains difficult, but as we move a few months ahead it’s likely forecast models will provide a higher level of certainty about what will happen.

The current outlook suggests that at least a moderate El Nino is likely and there is a risk of a substantial event.

What does this mean for the UK?

There has been some media speculation about how the El Niño conditions could impact our weather over the coming months.

However, even a strong El Niño only slightly changes the risk of extreme UK spring and summer weather and we wouldn't expect it to be the dominant driver of our weather over the next few months.

Looking further ahead, there are a number of factors that affect winter conditions in Britain. The increase in risk of a colder winter this year from the developing El Niño is currently considered small.

Date Created
May 2015

Met Office awarded for its collaborative work overseas

Description

The International Development team at the Met Office has won a prestigous award for its work helping increase the access, use and benefits of climate information services to 2.4 million people in Kenya.

The British Expertise International Award for ‘Outstanding International Collaboration’ was given to the Met Office for its work with the Adaptation Consortium delivering the ‘Mainstreaming Climate Adaptation into Planning’ project.

Other partners in the consortium are Christian Aid, the International Institute for Environment and Development, Kenya Meteorological Services and the National Drought Management Authority Kenya.

The project aims to address the underlying causes of vulnerability to climate change while strengthening adaptation to future extreme events. It has improved access to climate and other information, integrated climate change adaptation into development plans, developed better water infrastructure and training in water governance, and improved disease surveillance.

Date Created
May 2015

A wet start to May

Description

It has been a wet start to May with the UK already having seen more than its normal full-month rainfall after just 17 days.

Early Met Office figures up to the 17th of the month show the UK has had 74.1mm of rain – which is just over the full-month May average of 70.0mm.

Looking at individual countries – Wales, Scotland and Northern Ireland have all had more than their full month average, while England is just under.

Much of this rain fell in the first 10 days of the month, with relatively less rainfall since then. It's far too early to say where the month's rainfall will end up, but at this stage it looks unlikely that we'd see any records.

It has also been colder than average so far with a UK mean temperature of 9.2C, which is 1.2C below the full-month average.

As May is a transition month to warmer weather, you'd normally expect the first half of the month to be slightly below the full-month average – but even so, it has been cooler than normal.

Sunshine has been very close to average so far.

	Mean Temperature		**Sunshine hours**		**Rainfall**	
1-17 May 2015	**Actual**	**Diff to Avg**	**Actual**	**% of Avg**	**Actual**	**% of Avg**
	degC	**degC**	**hours**	**%**	**mm**	**%**
UK	9.2	-1.2	93.9	51	74.1	106
England	10.5	-0.7	96.8	51	55.4	95
Wales	9.5	-1.1	81.3	44	97.3	113
Scotland	6.9	-1.9	94.8	53	97.3	115
N Ireland	8.8	-1.4	81.0	44	82.1	113

Date Created
May 2015

Predictions of a below average Atlantic hurricane season

Description

The Met Office Atlantic tropical storm forecast for 2015 is for eight tropical storms between June and November, with a 70% chance (the '70% range') that the number will be in the range six to ten. This is below-normal relative to the 1980–2010 average of 12 tropical storms.

The forecast number of hurricanes — tropical storms with winds of at least 74 mph — is five (70% range three to seven); the average number of hurricanes is six.

Tropical storm Ana on 8 May 2015 as it approached the South Carolina coast. Credit: NASA Earth Observatory

The forecast Accumulated Cyclone Energy (ACE) index — a measure of the strength and duration of storms over the season — is 74 (70% range 40 to 108); the average ACE index is 104.

The North Atlantic hurricane season typically runs from June to November, but has already seen one tropical storm (Ana) make landfall in South Carolina.

The evolution of the El Niño Southern Oscillation (ENSO) over the next few months will play a large part in the North Atlantic hurricane season.

Forecast centres around the world have now declared that an El Niño has begun in the tropical Pacific.

Joanne Camp, climate scientist at the Met Office, said: "El Niño conditions in the Pacific can hinder the development of tropical storms in the Atlantic, so how this develops will be important for the storm

season ahead.”

While it is still too early to determine with confidence how strong this El Niño might be, forecast models from centres around the suggest this El Niño is likely to strengthen during the coming few months.

The tropical storm forecast is produced using the Met Office’s seasonal forecast system, GloSea5.

It has higher resolution than its predecessor, with better representation of the complex physical processes that cause tropical storm and hurricane development.

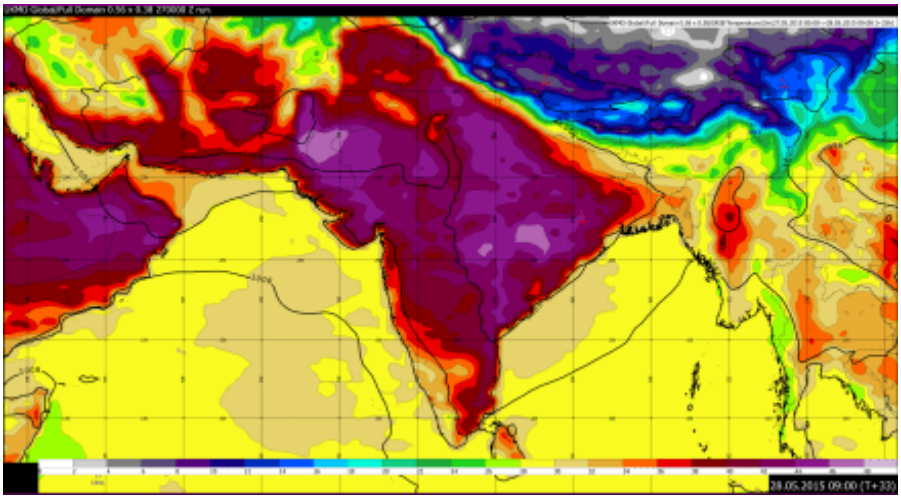
For regular updates on tropical cyclones worldwide follow @metofficestorms on Twitter.

Date Created
May 2015

Indian Heatwave

Description

A pre-monsoon heatwave continues to affect parts of India and Pakistan. Temperatures on Tuesday widely reached the mid-forties, with 48C recorded in Sibi, Pakistan, 47C in Daltonganj, northeast India and 45C in the capital New Delhi. Wednesday's highest temperatures were 47.5 C in Nawabshah, Pakistan, 47C in Daltonganj, and 46C in both Raipur and Nagpur.



Met Office Global Model mean sea level pressure and temperature for 28 May

The heat has been affecting this part of Asia for the last two weeks and continues to cause significant health and infrastructure problems. There are reports that over 1000 people have died, with the majority of those in Andhra Pradesh where humidity has been one of the primary issues, leading to heat stress. The prolonged nature of the heat, with exceptionally high overnight temperatures, has meant there has been no respite.

These hot conditions are expected to persist for the rest of this week, though some pre-monsoonal showers in the south may cool things a little. It then looks likely that temperatures will begin to return towards more normal values next week.

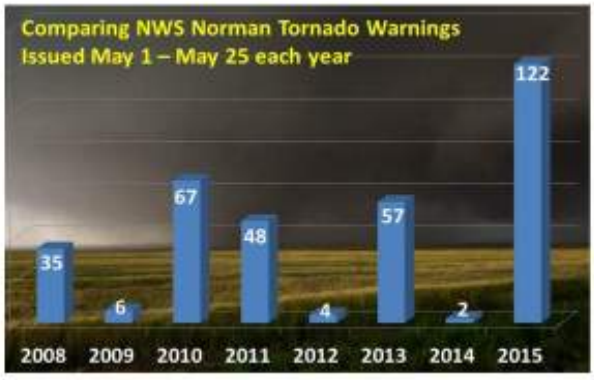
Hot, dry conditions often precede the Southwest Indian Monsoon at this time of year, but the monsoon is currently still to the south of India and Sri Lanka.

Date Created
May 2015

Met Office collaborates with US on severe storm prediction

Description

Tornadoes and severe thunderstorms are among the most damaging types of weather in the world – yet they pose a complex challenge to forecasters around the world. Research is being carried out into this type of severe weather with the aim of improving forecasts and warning and protecting lives. This is being led by the National Oceanic and Atmospheric Administration (NOAA) in the US.



Issued by the US National Weather Service in Norman

Each season has its own characteristics, and this storm season has been active in the Southern Great Plains after a relatively quiet season last year. Record breaking heavy rainfall has resulted in widespread flash flooding, giant hail and numerous tornadoes so far this May. Each year, NOAA brings together meteorologists from all over the world to advance the science in this area. In May and early June they run the Spring Forecasting Experiment at the National Weather Service in Norman, Oklahoma. It's held at this time of year because that's when parts of the US are particularly at risk of hazardous weather such as lightning, giant hail, and thunderstorms.

The current objective of the Spring Forecasting Experiment is to use the latest forecasting techniques to improve short-term advice and warnings of these severe storms. The assembled experts test a range of tools with the aim of bringing the best of these through to operational use.

A spokesperson from NOAA said: "The reason for the collaborative approach to the issue of severe convection is that the challenge facing the meteorological community is too large for any one organisation to deliver on".

"Working together benefits the science, resulting in improved forecasts for severe weather and better warnings. This in turn means better preparedness for the public of when and where severe weather will occur, with the ultimate goal of saving lives."

Scientists carrying out the experiments include Met Office staff alongside those from from the National Severe Storms Laboratory (NSSL), the Storm Prediction Centre (SPC), top universities and others.

As well as participating in forecasting exercises, the big test for the scientists comes during the real-time events as there's nothing like real-world operational challenges to focus the work.

Tornado and lightning, Rozel, Kansas May 2013

The Met Office takes an active role in the event, trialling our own high resolution forecasting models for the US domain.

Steve Willington, Chief Meteorologist at the Met Office, has been out in Oklahoma for several weeks taking part in the experiments. He said that "the severe weather has impacted the local area with various tornadoes sweeping through, one very close to the hotel where we are based, resulting in us being relocated to the hotel tornado shelter, which doubles as a laundry room." Steve added that "all this active weather is providing an excellent test for the Met Office models and we are seeing some great results with both strengths and weaknesses being identified. This will provide plenty of material for follow-up work to improve the models further once the experiment itself comes to an end in June".

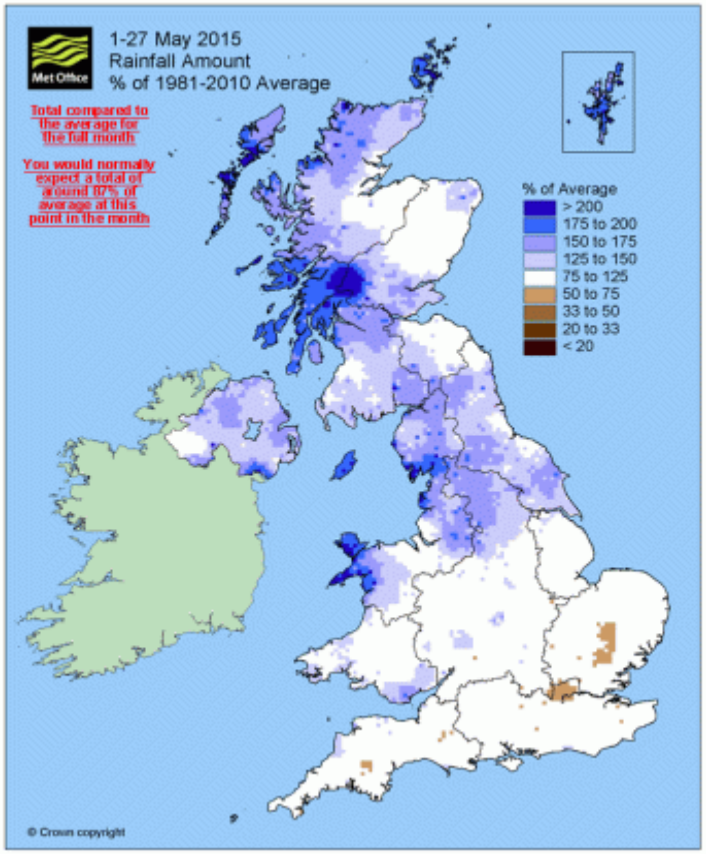
The tornado that passed close to the hotel on 6 May

Date Created
May 2015

A cold and wet May

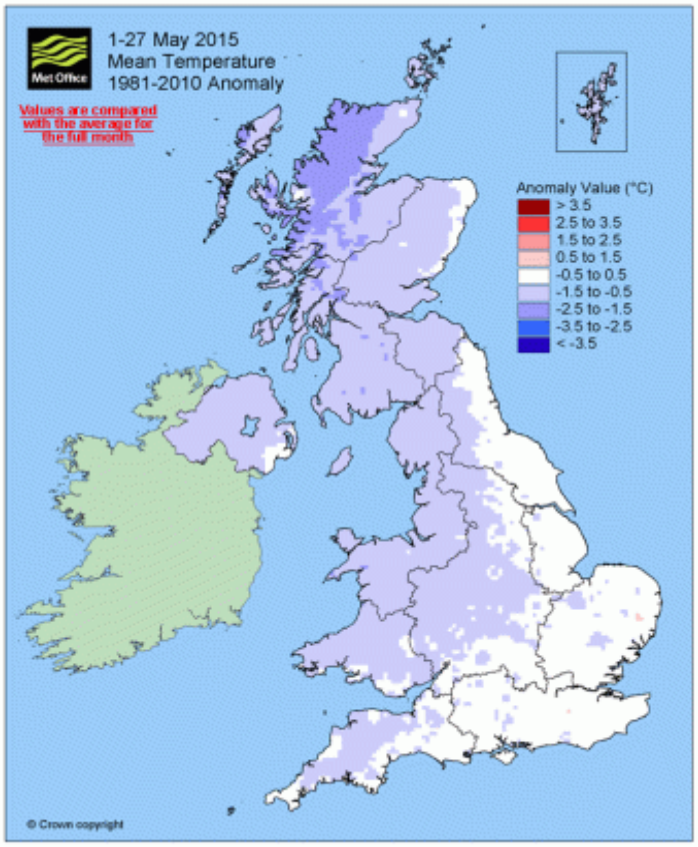
Description

The early May figures (1st – 27 May) show it has been a wet month over all, typified by cool, showery conditions, although there have been some drier interludes during the second half of the month.


1-27 May 2015
Rainfall Amount
% of 1981-2010 Average
Total compared to the average for the full month
You would normally expect a total of around 67% of average at this point in the month
% of Average
> 200
175 to 200
150 to 175
125 to 150
75 to 125
50 to 75
33 to 50
20 to 33
< 20
© Crown copyright

May rainfall anomaly 1981-2010

Maximum temperatures have been around 2 °C below average for many western counties, and lower than this in northwest Scotland. However, apart from a frost in many places on the 1st (Tulloch Bridge -5.6 °C), cloud-cover has resulted in minimum temperatures broadly holding up at around the seasonal average in England and Wales, and only around a degree below elsewhere.



May temperature anomaly 1981-2010

The unsettled weather has led to above average rainfall totals for many places, the main exceptions being in eastern Scotland and much of southern and eastern England. A few spots have had around twice the monthly average.

Unsurprisingly, given the unsettled conditions, most places have had slightly less sunshine than would have been expected.

Conditions look rather unsettled for the first few days of June, but high pressure is expected to build through the latter part of next week, bringing drier and warmer weather for much of the UK.

	Mean Temperature		**Sunshine hours**		**Rainfall**	
1-27 May 2015	**Actual**	**Diff to Avg**	**Actual**	**% of Avg**	**Actual**	**% of Avg**
	degC	**degC**	**hours**	**%**	**mm**	**%**
UK	9.6	-0.8	148.7	80	91.7	131
England	10.8	-0.5	157.6	83	66.5	114
Wales	9.8	-0.8	136.6	73	110.4	128
Scotland	7.6	-1.2	143.3	80	126.2	149
N Ireland	9.3	-0.9	114.1	63	103.3	142

Data from the Met Office's UK digitised records dating back to 1910. You can explore our climate data on our website. Clearly these are early month figures and the statistics at the end of the month will change somewhat.

Date Created
May 2015